

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

Claim 1 (Currently Amended) An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, or ~~[[a]]~~the full complement thereof.

Claims 2-3 (Canceled)

Claim 4 (Currently Amended) An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or ~~[[a]]~~the full complement thereof.

Claim 5 (Canceled)

Claim 6 (Currently Amended) An isolated nucleic acid molecule comprising a nucleotide sequence which ~~[[has]]~~is at least 95% ~~identity with~~ identical to the entire nucleotide sequence of SEQ ID NO:1, or ~~[[a]]~~the full complement thereof, wherein said nucleic acid molecule encodes a polypeptide which is capable of functioning as an extracellular nuclease.

Claims 7-9 (Canceled)

Claim 10 (Currently Amended) A vector comprising the nucleic acid molecule of any one of claims 1, 4, 6 ~~or, 39, 40, 41, 47 or 48.~~

Claim 11 (Original) The vector of claim 10, which is an expression vector.

Claim 12 (Original) A host cell transfected with the expression vector of claim 11.

Claim 13 (Previously Presented) The host cell of claim 12, wherein said host cell is a microorganism.

Claim 14 (Previously Presented) The host cell of claim 13, wherein said host cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

Claim 15 (Previously Presented) The host cell of claim 12, wherein the expression of said nucleic acid molecule results in the modulation in production of a fine chemical from said host cell.

Claim 16 (Previously Presented) The host cell of claim 15, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

Claims 17-38 (Canceled)

Claim 39 (Currently Amended) An isolated nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO:1, or [[a]]the full complement thereof.

Claim 40 (Currently Amended) An isolated nucleic acid molecule which encodes a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:2, or [[a]]the full complement thereof.

Claim 41 (Currently Amended) An isolated nucleic acid molecule consisting of a nucleotide sequence which is at least 95% identical to the entire nucleotide sequence of SEQ ID NO:1, or [[a]]the full complement thereof, wherein said nucleotide sequence encodes a polypeptide which is capable of functioning as an extracellular nuclease.

Claim 42 (Previously Presented) The host cell of claim 13, wherein said host cell is a bacterial cell.

Claim 43 (Previously Presented) The host cell of claim 42, wherein the expression of said nucleic acid molecule results in the modulation in production of a fine chemical from said host cell.

Claim 44 (Previously Presented) The host cell of claim 43, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

Claim 45 (Currently Amended) The isolated nucleic acid molecule of claim 6, wherein the nucleotide sequence ~~[[has]]is~~ at least 97% ~~identity with~~ identical to the entire nucleotide sequence of SEQ ID NO:1, or ~~[[a]]the~~ full complement thereof.

Claim 46 (Currently Amended) The isolated nucleic acid molecule of claim 41, wherein the nucleotide sequence is at least 97% identical to the entire nucleotide sequence of SEQ ID NO:1, or ~~[[a]]the~~ full complement thereof.

Claim 47 (Currently Amended) An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence which is at least 95% identical to the entire amino acid sequence of SEQ ID NO:2, or ~~[[a]]the~~ full complement thereof, wherein the polypeptide is capable of functioning as an extracellular nuclease.

Claim 48 (Currently Amended) The isolated nucleic acid molecule of claim 47, wherein the amino acid sequence is at least 97% identical to the entire amino acid sequence of SEQ ID NO:2, or ~~[[a]]the~~ full complement thereof.

Claim 49 (New) A method for producing a fine chemical, comprising culturing the host cell of claim 12 such that the fine chemical is produced.

Claim 50 (New) The method of claim 49, wherein said method further comprises the step of recovering the fine chemical from said culture.

Claim 51 (New) The method of claim 49, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

Claim 52 (New) The method of claim 49, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetophilum*, *Corynebacterium ammoniagenes*, *Corynebacterium fujiokense*, *Corynebacterium nitrilophilus*, *Brevibacterium ammoniagenes*, *Brevibacterium butanicum*, *Brevibacterium divaricatum*, *Brevibacterium flavum*, *Brevibacterium healii*, *Brevibacterium ketoglutamicum*, *Brevibacterium ketosoreductum*, *Brevibacterium lactofermentum*, *Brevibacterium linens*, *Brevibacterium paraffinolyticum*, and those strains set forth in Table 3.

Claim 53 (New) The method of claim 49, wherein expression of the nucleic acid molecule from said vector results in modulation of production of said fine chemical.

Claim 54 (New) The method of claim 49, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

Claim 55 (New) The method of claim 49, wherein said fine chemical is an amino acid.

Claim 56 (New) The method of claim 55, wherein said amino acid is selected from the group consisting of: lysine, glutamate, glutamine, alanine, aspartate, glycine, serine, threonine, methionine, cysteine, valine, leucine, isoleucine, arginine, proline, histidine, tyrosine, phenylalanine, and tryptophan.

Claim 57 (New) A method for producing a fine chemical, comprising culturing a cell whose genomic DNA has been altered by the inclusion of a nucleic acid molecule of any one of claims 1, 4, 6 or 47, thereby producing a fine chemical.

Claim 58 (New) A method for diagnosing the presence or activity of *Corynebacterium diphtheriae* in a subject, comprising detecting the presence of one or more of the nucleic acid molecules of claims 1, 4, 6 or 47, thereby diagnosing the presence or activity of *Corynebacterium diphtheriae* in the subject.